

Application No.: 09/730,277
Attorney Docket No.: 24958A

Remarks

Claims 7, 28, 31, 34, and 36-37 have been amended to remove phrases such as "air-emitting", "fluid-emitting", "emanating", and "delivering" from the claims. Claims 11, 13-14, 29-30, and 32-33 have been amended to provide language corresponding to the newly amended independent claims. Claim 12 has been amended for formatting reasons. Support for new claim 38 is found at least at page 5, lines 12-31 and Figure 1. Newly added claims 39-51 are supported at least by page 7, line 5 to page 8, line 25 and Figure 3. Claims 2, 5, and 6 have been canceled without prejudice and have been re-written as claims 52-54. Claims 1, 3-4, 8-10, and 15-27 were canceled without prejudice in previous Amendments. No question of new matter arises and entry of the amendments and new claims is respectfully requested.

Claims 7, 11-14, and 28-54 are before the Examiner for consideration.

Request for Examiner Interview

Applicants respectfully request an Examiner Interview prior to the Examiner issuing an Office Action. In this regard, Applicants respectfully request that the Examiner contact Applicants' representative, Amy L. Miller, at 703-435-6903 to set up such an interview.

Objection to Claim 7

Claim 7 has been objected to for lacking an indentation for the limitation "a gathering shoe" and the inclusion of a second "and" in the claim. In response to this objection, Applicants have amended claim 7 to indent "a gathering shoe" and have removed the extra "and" from the claim. Accordingly, Applicants respectfully request that this objection be reconsidered and withdrawn.

Objection to Claims 2 and 5-6

The Examiner has objected to claims 2 and 5-6 as being of improper dependent form. In response, Applicants have re-written claims 2 and 5-6 as new claims 52-54. Reconsideration and withdrawal of this objection is respectfully requested.

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Rejections under 35 U.S.C. §101 and 35 U.S.C. §112, second paragraph

Claims 2, 5-7, 11-14, 28-34, and 36-37 have been rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter and under 35 U.S.C. §112, second paragraph as being indefinite. In particular, the Examiner asserts that the claims require both apparatus and method steps, such as, for example, "emitting air".

Although Applicants respectfully disagree with the Examiner, to facilitate the prosecution of this application, Applicants have amended the claims to recite "air nozzle", "fluid nozzle", "atomizer nozzle", and "water nozzle" in place of "air-emitting nozzle", "fluid-emitting nozzle", "air-atomizing nozzle", and "water-emitting" nozzle respectively. In addition, Applicants have amended the claims to remove the phrase "filaments emanating from the bottom plate". Applicants respectfully submit that the claims do not contain both method and apparatus steps and are therefore both sufficiently definite and define statutory subject matter. Accordingly, Applicants respectfully request that these rejections be reconsidered and withdrawn.

Rejection Under 35 U.S.C. §102(b)

Claims 2, 5, 7, 12, 13, and 28-37 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,071,341 to Bohy, *et al.* ("Bohy").

Initially, Applicants note that claims 2, 5, and 7 have been canceled and re-written as claims 52-54 as suggested by the Examiner. In the traversal of this rejection below, claims 2, 5, and 7 will be addressed as claims 52-54 respectively. The rejection of claims 2, 5, and 7 is deemed to be moot in view of their cancellation.

In response to the remaining rejection, Applicants respectfully direct the Examiner's attention to independent claims 7, 28, 31, 34, and 35 and submit that claims 7, 28, 31, 34, and 35 define apparatuses for cooling filaments that are not disclosed in Bohy. Bohy teaches an apparatus that includes a gathering shoe that reciprocates in a direction to move the filaments from the application surface of the applicator. (*See, e.g.*, column 2, lines 20-23, column 3, lines 42-50, and the Abstract). When a production strand is being produced, the gathering shoe is retracted to a normal position. (*See, e.g.*, column 2, lines 22-26). The filaments may be sprayed with water by spray jets as they leave the bushing to cool them and then sized with a binder and/or size by the applicator. (*See, e.g.*, column 3, lines 23-28). The filaments are then passed into the groove of the gathering shoe, formed into a strand, and collected as a

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forming package. (See, e.g., column 3, lines 28-36). In situations where the filaments are removed from the application surface, they are sprayed with water, or a lubricant and water, but not the binder and/or size composition applied by the applicator. (See, e.g., column 3, lines 51-62).

Applicants respectfully submit that Bohy does not teach (or suggest) an air nozzle operable to conduct the flow of air as is required in each of independent claims 7, 28, 31, 34, and 35.¹ In fact, Bohy is silent with respect to any teaching of an air nozzle. In order for a reference to be anticipatory, each and every element of the claimed invention must be found within the four corners of the cited reference. (See, e.g., *In re Wilson*, 424 F.2d 1382, 165 USPQ 494)). Because Bohy does not teach an apparatus for cooling filaments in a filament forming process that contains an air nozzle, Applicants respectfully submit that Bohy is not an anticipatory reference. Therefore, Applicants submit that independent claims 7, 28, 31, 34, and 35 are not anticipated by Bohy. With respect to dependent claims 12, 13, 29-30, 32-33, 36, and 52-54, Applicants submit that because independent claims 7, 28, 31, 34, and 35 are not taught within Bohy and claims 12, 13, 29-30, 32-33, 36, and 52-54 are dependent upon one of independent claims 7, 28, 31, 34, or 35 and contain the same elements as the claims from which they depend, dependent claims 12, 13, 29-30, 32-33, 36, and 52-54 are also not taught by Bohy.

In view of the above, Applicants submit that claims 12, 13, 28-37, and 52-54 are not anticipated by Bohy and respectfully request that this rejection be reconsidered and withdrawn.

Rejection under 35 U.S.C. §103(a)

Claims 6, 11, and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,071,341 to Bohy, *et al.* ("Bohy") as applied to claims 28, 7, and 13 above, and further in view of U.S. Patent No. 4,167,959 to Loeffler ("Loeffler") and optionally in view of Applicants' asserted admission in the Response filed June 26, 2006. The Examiner admits that Bohy does not disclose a manifold. In this regard, Loeffler is cited for teaching that it is known in the art to use headers/manifolds to supply fluids to sprayers in the glass fiber art. The Examiner concludes that it would have been obvious to one of skill in

¹ It is to be appreciated that the means for emitting air defined by independent claim 35 is specifically described as an air nozzle operable to conduct the flow of air in dependent claim 36.

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the art to supply the fluids to the sprayers of Bohy by using a header/manifold as taught by Loeffler.

Initially, Applicants submit that claim 6 has been canceled without prejudice and re-written as claim 54. With respect to this rejection, claim 6 will be referred to as claim 54. The rejection of claim 6 is deemed to be moot in view of its cancellation.

In response to this rejection, Applicants respectfully direct the Examiner's attention to independent claims 7 and 28 and submit that claims 7 and 28 define apparatuses for cooling filaments that are not disclosed in Bohy and/or Loeffler and/or Applicants' asserted admission. As discussed above, Bohy teaches an apparatus that includes a gathering shoe that reciprocates in a direction to move the filaments from the application surface of the applicator. (See, e.g., column 2, lines 20-23, column 3, lines 42-50, and the Abstract). When a production strand is being produced, the gathering shoe is retracted to a normal position and may be sprayed with water by spray jets to cool them. (See, e.g., column 2, lines 22-26 and column 3, lines 23-28). When the filaments are removed from the application surface, they are sprayed with water or a lubricant and water, but not the binder and/or size composition applied by the applicator. (See, e.g., column 3, lines 51-62).

Applicants respectfully submit that neither Bohy nor Loeffler, either alone or in combination, teach or suggest the combination of features claimed in independent claims 7 and 28. In particular, none of Bohy or Loeffler teach or suggest an apparatus for cooling filaments in a filament forming process that includes an air nozzle operable to conduct the flow of air as is required by each of independent claims 7 and 28. In fact, each of the cited references is silent as to any teaching or suggestion of an air nozzle. As such, it is respectfully submitted that the combination of the teachings of Bohy and Loeffler would not result in an apparatus for cooling filaments in a filament forming process as claimed in claims 7 and 28.

In addition, Applicants submit that there is no motivation for one of skill in the art to arrive at the presently claimed invention based on the disclosures of Bohy and/or Loeffler. To establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (See, e.g., *Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). It

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is respectfully submitted that one of ordinary skill in the art would not be motivated to arrive at apparatuses claimed in claims 7 and 28 based on the teachings of Bohy and Loeffler because both Bohy and Loeffler are silent as to any teaching or suggestion of an air nozzle. Accordingly, one of ordinary skill in the art would not be motivated to utilize an air nozzle in an apparatus for cooling filaments based on the teachings of Bohy and/or Loeffler. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness.

With respect to the Examiner's rejection over Applicants' asserted admission that the phrase "air-emitting" signifies "emitting air" and "fluid-emitting" signifies "emitting fluid", Applicants respectfully submit that these phrases have been removed from independent claims 7 and 28. Accordingly, the claims do not contain any "method steps" as asserted by the Examiner in the outstanding Office Action.

In view of the above, it is respectfully submitted that independent claims 7 and 28 are not taught or suggested by Bohy and Loeffler and/or Applicants' asserted admission, either alone or in any combination, and that claims 7 and 28 are therefore non-obvious and patentable. Because claims 11, 14, and 54 are dependent upon claims 7 or 28, which are not taught or suggested by Bohy and/or Loeffler (or Applicants' asserted admission) as discussed above and because claims 11, 14, and 54 contain the same elements as the claim from which they depend, it is submitted that dependent claims 11, 14, and 54 are also not taught or suggested by Bohy and Loeffler and/or Applicants' asserted admission.

In light of the above, Applicants submit that claims 6, 11, and 14 are non-obvious and patentable over Bohy and Loeffler and/or Applicants' asserted admission and respectfully request reconsideration and withdrawal of this rejection.

Conclusion

In light of the above, Applicants believe that this application is now in condition for allowance and therefore request favorable consideration.

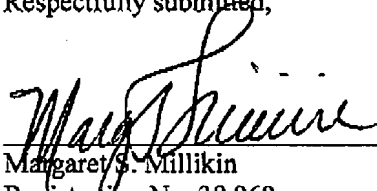
If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

Date: 10/1/07


Margaret S. Millikin
Registration No. 38,969

Owens Corning
Patent Department, Bldg. 21-0
2790 Columbus Road
Granville, Ohio 43023
(740) 321-7213